

IN THE CLAIMS

Please amend claims 43-84 as follows.

43. A set top device to provide interactive links in television (TV) programming, the set top device comprising:

an interface for communications links to receive TV signals, the TV signals including one or more frames comprising an embedded graphic symbol;

a monitor output to provide a display of the received TV signals including one or more frames comprising the embedded graphic symbol;

an input to receive user input from a viewer; and

a processor to generate an active region corresponding to the graphic symbol, and to trigger a predetermined action associated with the active region in response to viewer input.

44. The set top device of claim 43 wherein the received TV signals comprise TV picture data having the graphic symbol embedded therein.

45. The set top device of claim 43 wherein the graphic symbol in the TV signal is specified by a broadcaster of the TV signal.

46. The set top device of claim 43 wherein the received TV signals include information defining the active region to be generated.

47. The set top device of claim 43 wherein receipt of the TV signal further comprises receiving information defining the predetermined action to be triggered.

48. The set top device of claim 43 wherein the processor is configured to generate a webpage having a link to a resource.

49. The set top device of claim 48 wherein the active region is substantially in registration with the graphic symbol received in the TV signal.

50. The set top device of claim 43 wherein the active region is a same size and shape and at a same location as the received graphic symbol.

51. The set top device of claim 43 wherein the active region roughly approximates the size, shape and/or location of the received graphic symbol.

52. The set top device of claim 43 wherein the generated active region is visually transparent to the viewer.

P2
53. The set top device of claim 43 wherein the generated active region is visible to the viewer.

54. The set top device of claim 53 wherein the visible active region is translucent.

55. The set top device of claim 53 wherein the visible active region enhances an appearance of the received graphic symbol.

56. The set top device of claim 53 wherein the visible active region serves as a visual cue to the viewer that the active region is available.

57. The set top device of claim 43 wherein the processor is configured to modify an appearance of the active region.

58. The set top device of claim 57 wherein the active region's appearance is modified in response to the passage of time.



59. The set top device of claim 57 wherein the active region's appearance changes based on a current context.

60. The set top device of claim 59 wherein a first context corresponds to a first state in which the set top device is logged into an online service provider host system and a second context corresponds to a second state in which the set top device is not logged into the online service provider host system.

61. The set top device of claim 57 wherein the active region's appearance changes in response to an event.

62. The set top device of claim 61 wherein the event comprises detecting that a viewer has indicated interest in the active region.

63. The set top device of claim 61 wherein the event comprises detecting that a viewer has selected the active region.

64. The set top device of claim 58 wherein modification of the active region's appearance comprises changing one or more of the following visual characteristics of the active region: transparency, translucency, color, shape, size or location.

65. The set top device of claim 43 wherein the viewer input that triggers the predetermined action comprises selection of the active area.

66. The set top device of claim 43 wherein the processor is configured to access a resource linked to the active region.

67. The set top device of claim 66 wherein the accessed resource comprises one or more of the following: a webpage, a text file, a sound file, an image file, a movie file, or a 3D world.

68. The set top device of claim 66 wherein the accessed resource comprises a communications utility that enables the viewer to communicate with others.

69. The set top device of claim 68 wherein the communications utility comprises one or more of the following: an email program, an instant messaging program, or a chat program.

70. The set top device of claim 66 wherein the accessed resource comprises a local function.

71. The set top device of claim 70 wherein the local function comprises a TV or VCR control operation.

A2 72. The set top device of claim 43 wherein the processor is configured to modify the predetermined action prior to triggering.

73. The set top device of claim 72 wherein the predetermined action is modified in response to the passage of time.

74. The set top device of claim 72 wherein the predetermined action is changed based on a current context.

75. The set top device of claim 74 wherein a first context corresponds to a first state in which the set top device is logged into an online service provider host system and a second context corresponds to a second state in which the set top device is not logged into the online service provider host system.

76. The set top device of claim 72 wherein the predetermined action is changed in response to an event.

77. The set top device of claim 76 wherein the event comprises detecting an action performed by the viewer.

78. The set top device of claim 72 wherein the processor is configured to modify an address of a link associated with the active region to specify a different resource.

79. The set top device of claim 43 wherein the TV signal includes a plurality of graphic signals within a TV frame.

80. The set top device of claim 79 wherein the processor is configured to modify a separate active region for each graphic signal.

81. The set top device of claim 80 wherein each active region has its own associated predetermined action.

82. The set top device of claim 80 wherein the processor is configured to trigger a separate predetermined action for each active region.

83. The set top device of claim 43 wherein information defining the active region and/or the predetermined action is received in during the vertical blanking interval of the TV signal.

84. The set top device of claim 43 wherein information defining the active region and/or the predetermined action is specified prior to receiving the TV signal.

Please add the following new claims 86-105.

--86. A computer-implemented method of providing interactive links in TV programming, the method comprising:

receiving a TV signal;
receiving data corresponding a graphic symbol;
generating a TV picture from the TV signal;

generating an active region corresponding to the graphic symbol in the TV picture; and triggering a predetermined action associated with the active region in response to viewer input.

87. The method of claim 86 wherein receipt of the graphic symbol data further comprises receiving information defining the active region to be generated.

88. The method of claim 86 wherein receipt of the graphic symbol data further comprises receiving information defining the predetermined action to be triggered.

89. The method of claim 86 wherein generation of the active region corresponding to the graphic symbol comprises generating a webpage having a link to a resource.

90. The method of claim 86 wherein the active region is a same size and shape and at a same location in the TV picture as the received graphic symbol.

91. The method of claim 86 wherein the active region roughly approximates the size, shape and/or location of the received graphic symbol.

92. The method of claim 86 wherein the generated active region is visually transparent to the viewer.

93. The method of claim 86 wherein the generated active region is visible to the viewer.

94. The method of claim 93 wherein the visible active region is translucent.

95. The method of claim 93 wherein the visible active region enhances an appearance of the received graphic symbol.

96. The method of claim 86 further comprising modifying the active region's appearance in response to the passage of time.

97. The method of claim 86 further comprising modifying the active region's appearance based on a current context.

98. The method of claim 97 wherein a first context corresponds to a first state in which a set top device is logged into an online service provider host system and a second context corresponds to a second state in which the set top device is not logged into the online service provider host system.

99. The method of claim 86 further comprising modifying the active region's appearance in response to an event.

100. The method of claim 99 wherein modifying the active region's appearance comprises changing one or more of the following visual characteristics of the active region: transparency, translucency, color, shape, size or location.

AB 101. The method of claim 86 wherein the viewer input that triggers the predetermined action comprises selection of the active area.

102. The method of claim 86 wherein triggering the predetermined action comprises accessing a resource linked to the active region.

103. The method of claim 102 wherein the accessed resource comprises one or more of the following: a webpage, a text file, a sound file, an image file, a movie file, or a 3D world.

104. The method of claim 102 wherein the accessed resource comprises a communications utility that enables the viewer to communicate with others.

Applicant : Robert M. COOPER, et al.
Serial No. : 09/365,734
Filed : August 3, 1999
Page : 9

Attorney's Docket No.: 06975-043001

A3 105. The method of claim 104 wherein the communications utility comprises one or more of the following: an email program, an instant messaging program, or a chat program.--
